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FEDERAL COMMUNICATIONS COMMISSION
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Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of

Amendment of Section 22.367(a)(4))	RM No. 9387
of the Commission's Rules;)	
Petition for Rulemaking of)	
Andrew Corporation)	

REPLY COMMENTS OF BELL ATLANTIC MOBILE, INC.

Bell Atlantic Mobile, Inc. (BAM), pursuant to Section 1.405(b) of the Commission's Rules, submits these reply comments in support of the Petition for Rulemaking filed by Andrew Corporation on September 18, 1998.

Andrew Corporation seeks modification of Section 22.367(a)(4), which states that analog transmitting antennas which are used in the cellular radiotelephone service must be vertically polarized. Andrew states that permitting base station antennas to use horizontal as well as other polarizations will improve the quality of cellular service and will provide other important benefits. Andrew's petition is unopposed,¹ and it should be promptly granted. A more flexible rule that allows cellular licensees to use base station antennas with any polarization will have numerous benefits.

¹ AirTouch Communications, Inc. and GTE Service Corporation filed comments supporting Andrew's Petition on December 3, 1998. No party opposed it.

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First, permitting the deployment of non-vertically polarized antennas will allow for smaller antenna structures, eliminating the large triangular platform which needs to be installed at the top of the structure where vertical polarization is required. It will enable more antennas to use the same amount of space on the structure. Many advantages will flow from these changes. Tower loads can be reduced, more antennas can be collocated on the same tower, and the appearance of the antenna will be improved. Given that visual concerns are central to many of the current disputes between wireless carriers and local zoning boards, eliminating the requirement for vertically polarized analog antennas can help resolve those concerns and may speed approvals for sites that carriers need to serve the public.

Second, eliminating the rigid requirement of Section 22.967(a)(4) would remove the current disparate regulation of digital vs. analog antennas used by CMRS providers. Section 22.901(d)(2) exempts cellular systems employing digital or other advanced technologies from complying with Section 22.367. Similarly, PCS systems, which use digital technologies, are not subject to antenna polarization requirements.² Given the Commission's commitment to regulatory symmetry

² In adopting its PCS rules, the Commission declined to adopt polarization requirements or many other technical standards. It found the wireless carriers and voluntary industry standards groups were in the best position to determine appropriate technical standards, and that imposing standards by rule could discourage innovation. Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN Docket No. 90-314, Second Report and Order, 8 FCC Rcd 7700 (1993). There is no reason why that approach should not also govern technical standards for cellular service.

among competing wireless services,³ there is no basis for maintaining special restrictions on analog cellular systems.

Third, cellular carriers will not employ non-vertically polarized antennas if this would degrade system performance. To the contrary, as the record shows, this change will improve, not impair, cellular service. This rule change is thus self-policing and will require no additional oversight by the Commission.

Fourth, enabling analog cellular systems to deploy horizontally-polarized base station transmitters will significantly improve the quality of service in many situations. The benefits of multiple polarization in the FM broadcast service and other services are well-established. These benefits result from the fact that after a signal is reflected, its actual polarization at the receive antenna may have any orientation, but that for some percentage of the time, the orientation is wrong for the receive antenna. By transmitting multiple polarizations, the likelihood that one will be correct and be received is significantly greater.

This is particularly true for cellular because of the expansion of that service from reliance principally on mobile phones installed in vehicles to the use of hand-held portable phones as well. These phones are often left lying down in a horizontal position. In those situations, vertically-polarized signals are less likely to be picked up by the phone, impairing subscribers' ability to receive as well as transmit calls.

³ Implementation of Sections 3(n) and 332 of the Communications Act, GN Docket No. 93-252, Third Report and Order, 9 FCC Rcd 7988 (1994).

should also be made to state that cellular stations as well "are not limited as to wave polarization."

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing "Reply Comments of Bell Atlantic Mobile, Inc." were sent this 16th day of December by first-class mail, postage prepaid, to the following persons:

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